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1. (twice amended) An optical structure for processing optical energy comprising:

a metal layer having a first surface comprising a plurality of voids having a dimension less than the wavelength of optical energy being processed;

an active or non-linear material substantially adjacent to at least a portion of the metal layer in the area of the plurality of voids wherein the plurality of voids in the metal layer exhibit localized plasma resonances that enhance emission and absorption of optical energy through the active or non-linear material; and

a substrate for supporting the metal layer.



18. (twice amended) A method for processing optical energy comprising directing optical energy at a first surface of a metal layer, said surface comprising one or more voids having a dimension less than the wavelength of optical energy being processed and an active or non-linear material substantially adjacent to at least a portion of the plurality of voids.

28. (twice amended) A laser comprising:

a metal layer having a first surface comprising a plurality of voids, said voids having a dimension less than the wavelength of optical energy being processed;

an active material substantially adjacent to at least a portion of the metal layer in the area of the plurality of voids wherein the plurality of voids in the metal layer exhibit localized plasma resonances that enhance emission of optical energy through the active material; and

a substrate for supporting the metal layer.

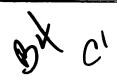
29. (twice amended) An LED structure comprising:

a metal layer having a first surface comprising a plurality of voids, said voids having a dimension less than the wavelength of optical energy being processed;

an active material substantially adjacent to at least a portion of the metal layer in the area of the plurality of voids wherein the plurality of voids in the metal layer exhibit localized plasma resonances that enhance emission of optical energy through the active material; and

a substrate for supporting the metal layer.

30. (amended) An optical switch structure comprising:



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a metal layer having a first surface comprising a plurality of voids, said voids having a dimension less than the wavelength of optical energy being processed;

a non-linear material substantially adjacent to at least a portion of the metal layer in the area of the plurality of voids wherein the plurality of voids in the metal layer exhibit localized plasma resonances that enhance emission of optical energy through the non-linear material; and

a substrate for supporting the metal layer.